NGAC Comments on FY 2020 FGDC Summary of GDA Annual Reports

A Report of the National Geospatial Advisory Committee April 2021

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1.0 Overview

The Geospatial Data Act of 2018 (GDA) includes reporting responsibilities for "covered agencies" (agencies identified in the GDA as having specific geospatial management responsibilities), and "lead covered agencies" (covered agencies that also have lead responsibility for coordination and management of National Geospatial Data Asset [NGDA] data themes). These agencies are responsible for submitting annual reports on their performance in meeting the requirements of the GDA. The Federal Geographic Data Committee (FGDC) developed a summary of these annual reports detailing the status of each covered agency and each NGDA data theme for fiscal year (FY) 2020. As required under GDA Section 2802(c)(11)(A), the FGDC provided this summary report to the National Geospatial Advisory Committee (NGAC) for review and comment. This paper provides the NGAC's comments on the FY 2020 FGDC summary report.

All covered agencies and lead covered agencies complied with the reporting requirements. There were 13 reporting requirements included in a survey instrument designed to simplify reporting by the covered agencies. Reports were provided by the lead covered agencies on all of the NGDA Themes.

The FGDC provided opportunities to engage stakeholders in the process and made preliminary reporting available for comment. All participants in the reporting process should be applauded for their efforts, as this is the first reporting by agencies covered under the GDA. The depth and breadth of reporting was impressive. It is clear that significant effort went into organizing and completing the reports, as well as designing a comprehensive reporting process.

2.0 Positive Elements

2.1 Common Survey Instrument

Utilizing a common survey instrument among the covered agencies and lead covered agencies resulted in consistent reporting that enables the stakeholders to draw conclusions on progress regarding data themes and make comparisons between agencies. The survey methodology provides for a clear understanding of the status of individual geospatial data assets. The use of online technology to deliver the report streamlined the review process and allowed stakeholders to migrate between the summary and detailed information. Using the GeoPlatform as a common data collection method helped to streamline the reporting process for covered agencies and lead covered agencies.

2.2 Self-Assessment Rating Criteria

Providing the survey instrument rating criteria in the FGDC summary report was a helpful reminder of the structure and simplicity of the survey. Summarizing the reports in dashboards with links to the detailed agency reports provided sufficient level of detail for stakeholders to understand the information provided by the covered agencies and lead covered agencies.

2.3 GDA Baseline Information

The information contained in this inaugural report provides useful baseline information which will contribute to future reporting, planning and decision making. The FGDC summary report builds upon previous reporting, e.g., the 2015 NGDA Lifecycle Maturity Assessment. Furthermore, the information is helpful for understanding the state of individual geospatial data assets.

3.0 Areas Needing Improvement

3.1 Self-Assessment Approach

This is a self-assessment approach by agencies using a 3-level reporting assessment. Without knowing how each agency conducted their self-assessment, it seems like there could be variable differences in the way each agency interprets the criteria for meeting, making progress or failing to meet expectations. For example, some agencies with responsibility for multiple geospatial data assets reported meeting expectations, presumably for all of their included assets. Other agencies with responsibility for one or more assets reported making progress toward expectations. In addition, a single covered agency may have multiple geospatial data asset responsibilities. If one of the most important of those responsibilities falls short of expectations, how does that calculate into the overall score; is there an opportunity in the future to differentiate the maturation of each covered data asset? Better understanding this process in the future would be helpful.

3.2 Table Formatting/Consistency

In Table 1, some covered agencies have null values for being theme leads and/or dataset managers. This role and the impact on the reporting status should be noted in the agency report and the FGDC summary. While Tables 2 and 3 stand alone, it seems that one would have an impact on the other (Table 2 deals with requirements while Table 3 deals with data themes). The requirements table (Table 2) indicates that many agencies are meeting expectations, while the data theme table (Table 3) indicates that most agencies are simply making progress.

When drilling down from the summary report to the agency self-evaluation reports, there appear to be differences between the agency reports and the agency's own Inspector General (IG) audits. At the time of this reporting, the IG audits and agency self-evaluation reports were conducted using two different evaluation approaches and criteria. The NGAC notes that the agency reports and agency IG audits used differing criteria. It is recommended that in future, agencies provide their GDA reporting information to their IG offices. The following issues address specific aspects of the summary report:

- The published NGDA Portfolio itemizes 176 datasets, yet the agencies reported on only 169 datasets. It would appear that the FGDC is only reporting on "approved" datasets. If so, this should be noted in the summary report.
- An overall score for each of the 13 requirements should be included in the summary.

- The definitions of the rating criteria should be further clarified so as to reduce or eliminate interpretations of their intended meaning.
- The report should include an explanation of what an agency is required to do to meet each of the 13 requirements criteria in Table 2.
- The report should include an explanation of what an agency is required to do to meet each of the four data theme criteria in Table 3.
- The key observations in the conclusions should address insights regarding how the requirements are being achieved rather than the status reporting process itself.
- The recommendations in the conclusions should provide examples of what is meant by "streamline and simplify" the reporting to provide clarity on how accountability, transparency and efficiency could be achieved.

4.0 Recommendations for Future Reports

4.1 Capacity Burdens

NGAC members have voiced concerns about the additional burdens placed on agencies to comply with GDA requirements. Including information in the summary report about the impacts to agencies of the additional reporting, exacerbated by budget reductions or unexpected increased work due to national circumstances, may help the Office of Management and Budget (OMB) and Congress make decisions about bolstering capabilities.

4.2 Reporting Agencies

Some agencies with significant geospatial responsibilities, such as the Environmental Protection Agency (EPA) and the Federal Communications Commission (FCC), were not identified as covered agencies or lead covered agencies in the GDA. Congress may consider designating additional agencies as covered agencies. Future summary reports should be focused on the results, rather than on the reporting process itself. Consider adding language that explains the role of a covered agency that is not responsible for being a NGDA Theme lead or a NGDA Dataset Manager. In some instances, certain covered agencies provide their data for inclusion in another agency's report.

4.3 Stakeholder Engagement

As the covered agencies and lead covered agencies gain experience with this process, a more analytical view is needed for NGAC to better understand the overall health of U.S. national geospatial capabilities and to determine what advice is needed for the future. Agencies should solicit feedback from data consumers to gain insight on where improvements can be realized. These reports, especially the NGDA Themes, could provide an opportunity to reconcile federal datasets with those produced from State, Local, Tribal, and Territorial (SLTT) partners; for example, the data themes curated by the Federal agencies, such as the NGDA themes and the Homeland Infrastructure Foundation-Level Data (HIFLD) themes.

4.4 Survey Instrument

FGDC should consider adding a brief description of the survey instrument or process, and perhaps include a link to the survey instrument, in the summary report. The survey instrument could be improved to reduce the number of questions that are essentially multi-part questions that only have a one-part response. Many terms used in the survey questions may lead to vague answers: promote, reviewed, etc. If terms of this nature are to be used, definitions should be provided in the survey to promote clarity and consistency in the responses.

4.5 Future Results and Visualization

Based on future report outcomes, the summary report process should include recommendations for specific improvements, as well as new or revised planning that can contribute to meeting future national geospatial requirements. With the rich amount of information, future efforts could simplify and generalize some of the results for legislators, legislative staff, stakeholders, and the general public to get a quick view in a short amount of time. FGDC should continue to use the power of dashboards to present future reports using the functionality to provide Executive, Secretariat, and Director level views and detailed views, with the ability to drill down to the individual covered agency and NGDA Data Theme reports.

4.6 Self-Assessment Measures

FGDC should consider adding more granularity on the "Making Progress" category. This approach would enable less ambiguity while maintaining the 3-level construct embedded in the law. Possible subcategories to the "making progress" category might include:

LP – little progress, just beginning to address the requirements

MP – moderate progress, well underway in addressing the requirements

SP – substantial progress, significant improvement already attained, close to meets

As the surveys are refined, FGDC should utilize survey design experts/statisticians to ensure the data collected is clear, useful, and actionable.

5.0 Conclusion

The NGAC acknowledges the complex and daunting effort that went into producing the initial agency reports and FGDC summary report. A consistent reporting mechanism resulted in organized covered agency and lead covered agency (NGDA Themes) reports. Future iterations of these reports can be improved with some specific changes to the process. The NGAC would like to thank the FGDC for the opportunity to review and comment on the summary report and applauds the thoroughness and completeness of the GDA reporting. The results of these individual reports will inform NGAC, Congress, and the broader geospatial community on the future of the National Spatial Data Infrastructure (NSDI).

<u>Acknowledgements</u>: This paper was developed by an NGAC subcommittee consisting of Doug Adams (Chair), Chad Baker, Tony LaVoi, Cy Smith, and Tim Trainor.